

IWASAKI et al. -- 10/701,488
Attorney Docket: 008312-0306632

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of manufacturing a perpendicular magnetic recording medium, comprising forming on a nonmagnetic substrate a perpendicular magnetic layer at 280 320 to 450°C by using a magnetic layer-forming material containing at least one additive component selected from the group consisting of cobalt, platinum, and at least one additive component of molybdenum and tungsten, said perpendicular magnetic layer being constructed to include a plurality of magnetic crystal grains containing cobalt and platinum, which are separated from each other by crystal grain boundaries and providing a perpendicular magnetic layer in which the additive component is segregated in the crystal grain boundaries.
2. (Currently amended) The method of manufacturing a perpendicular magnetic recording medium according to claim 1, wherein the perpendicular magnetic layer is formed at 300 320°C to 400 380°C on the nonmagnetic substrate.
3. (Original) The method of manufacturing a perpendicular magnetic recording medium according to claim 1, further comprising forming at least one underlayer having a hexagonal close-packed structure on the nonmagnetic substrate before the step of forming the perpendicular magnetic layer.
4. (Original) The method of manufacturing a perpendicular magnetic recording medium according to claim 3, wherein forming the underlayer comprises forming a second underlayer containing at least one element selected from the group consisting of nickel, niobium, tantalum, aluminum, tungsten, cobalt, carbon and titanium, and forming on the second underlayer a first underlayer containing at least one element selected from the group consisting of titanium, ruthenium, chromium, hafnium, cobalt, platinum, boron, copper, tantalum, molybdenum and tungsten.

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5. (Original) The method of manufacturing a perpendicular magnetic recording medium according to claim 3, further comprising forming a soft magnetic backing layer before forming the underlayer.

6. (Currently amended) The method of manufacturing a perpendicular magnetic recording medium according to claim 3, further comprising forming a cobalt-chromium series perpendicular recording layer after forming of the ~~perpendicular magnetic film~~ underlayer and before forming of the underlayer perpendicular magnetic layer.

7.-20. (Canceled)